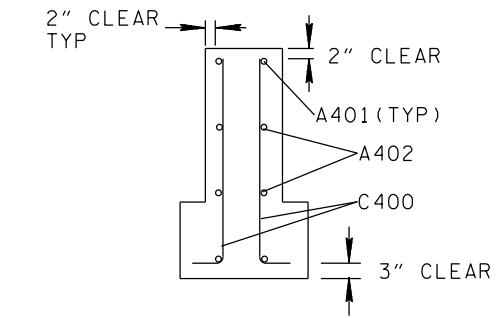
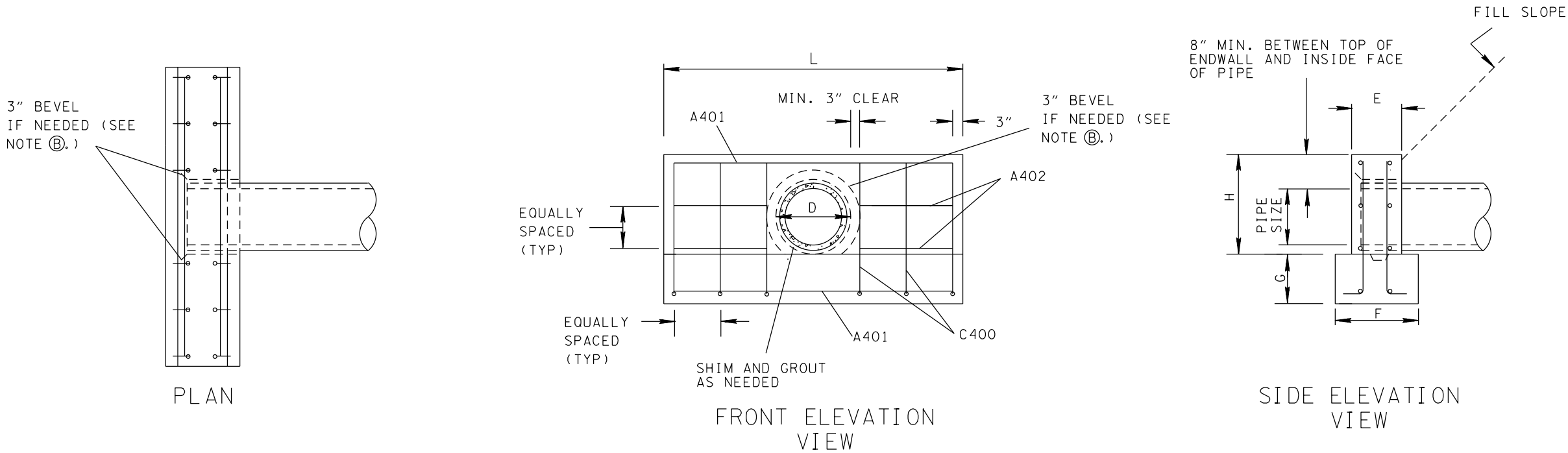


STRAIGHT TYPE CONCRETE ENDWALL



REINFORCING STEEL LEGEND	
<div><div></div><div>a</div></div>	A400
<div><div></div><div>b</div></div>	C400

DIMENSIONS AND ESTIMATED QUANTITIES FOR STRAIGHT CONCRETE ENDWALL								
PIPE SIZE	HOLE SIZE	WALL			FOOTING		CONC.	REINF. STEEL
IN	D (IN)	L	H	E	F	G	C.Y.	LB
18"	26"	6'-0"	2'-6"	1'-3"	2'-1"	1'-3"	1.16	40
24"	33"	8'-0"	3'-0"	1'-4"	2'-2"	1'-4"	1.86	68
30"	40"	10'-0"	3'-6"	1'-6"	2'-4"	1'-6"	2.98	90

BILL OF STEEL												
BAR	18" PIPE				24" PIPE				30" PIPE			
	a	b	LENGTH	NUMBER	a	b	LENGTH	NUMBER	a	b	LENGTH	NUMBER
A401	66	0	66	4	90	0	90	4	114	0	114	4
C400	40	6	46	8	47	6	53	12	55	6	61	12
A402	18.5	0	18.5	8	27	0	27	8	35.5	0	35.5	12
	TOTAL LB 706 in 40				TOTAL LB 1212 in 68				TOTAL LB 1614 in 90			

- GENERAL NOTES
- (A)

CONCRETE ENDWALL SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD CONSTRUCTION SPECIFICATIONS,SECTION 611, AND/OR SPECIAL PROVISIONS.
- (B)

ALL STRAIGHT CONCRETE ENDWALLS ON THE INLET END OF PIPE, AND AT 90° SKEW SHALL BE BEVELED AT 3"AT AN 45° ANGLE. BEVEL WILL NOT BE REQUIRED WHEN ENDWALL IS CONSTRUCTED ON THE "BELLED "END OF CONCRETE PIPE.
- (C)

ENDWALL MAY BE MODIFIED TO ACCOMMODATE MULTIPLE PIPES WHEN MORE THAN ONE PIPE IS PROPOSED,THE DISTANCE FROM CENTER TO CENTER OF PIPE SHALL BE D + 1'-0".
- (D)

PAYMENT FOR ENDWALLS WILL BE MADE AS FOLLOWS:

ITEM 611-07.01, CLASS "A" CONCRETE (PIPE ENDWALLS)----CUBIC YARD.

ITEM 611-07.02. STEEL BAR REINFORCING (PIPE ENDWALLS)----POUND.
- (E)

SEE SECTION 6.04.3.3 IN THE TDOT DESIGN MANUAL FOR RIPRAP APRON REQUIREMENT.
- (F)

PRECASTING IS ALLOWED.
- (G)

PIPE OPENING TO BE BASED ON TYPE "B" WALL THICKNESS (AASHTO M170).
- (H)

PIPE ENDWALLS FOR SLOPES STEEPER THAN 3:1 (PREVIOUSLY TYPE "U") WILL NOW USE TYPE "B" SEE D-PE-9.

- REV. 9-28-83:

REDREW AND ADDED TABLE FOR STRAIGHT ENDWALL WHEN PIPE IS SKEWED.
- REV. 2-19-88:

ADDED SAFETY ADJUSTMENTS " U " TYPE ENDWALL.
- REV. 1-19-94 :

REDREW AND REORGANIZED DRAWING. ELIMINATED TYPE " U " ENDWALL FOR 3:1 SLOPE.
- REV. 1-19-97:

ADDED UNITS TO HEADING FOR TABLE FOR SKEWED PIPE.
- REV. 6-1-09:

ADDED GENERAL NOTE (B).
- REV. 7-19-10:

REMOVED GENERAL NOTE (B).
- REV. 1-15-13:

ADDED REINFORCEMENT AND CHANGED NOTES. ADDED BILL OF STEEL, REMOVED "U" AND "L" TYPE ENDWALL.
- REV. 12-1-14:

REVISED BAR DESIGNATION MINOR EDITING.
- REV. 4-23-15:

REVISED DIMENSIONS AND ESTIMATED QUANTITIES FOR STRAIGHT CONCRETE ENDWALL.
- REV. 2-3-16:

REVISED FRONT AND SIDE ELEVATION VIEW.